## ABSTRACT OF THE DISCLOSURE

An optical disk apparatus for recording data on an optical disk. Prior to recording data on the optical disk, a controller records test data in a test area of the optical disk, thereby optimizing write power. After having recorded the test data, the controller computes a difference between jitter or an error rate obtained when test data are overwritten at write power higher than that used for recording test data and jitter or an error rate obtained when test data are overwritten at write power lower than that used for recording the test data. A jitter or error rate difference is detected while write power is changed. Write power at which the jitter or error rate difference is smaller than or equal to a predetermined threshold value is selected as optimum write power, and data are recorded in a data area.

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